

Brett Eugene Barwick

University of Nebraska – Lincoln

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Education

2007 (anticipated May) Ph.D (Physics and Astronomy), Univ. of Nebraska – Lincoln.
2004 M.S. (Physics and Astronomy), Univ. of Nebraska – Lincoln.
2002 B.S., (Physics), Doane College.

Academic Honors

2006 Preparing Future Faculty Fellow
2005-2007 Graduate Student Rep. on the Physics Graduate Committee.
2003 Avery Summer Fellowship.
2001-2002 President, Physics, Chem. and Engineering Club – Doane College
1998-2006 Marshall H. and Nellie Alworth Memorial Scholarship.

Teaching

2002, Spring Taught First year Undergraduate lab (Electromagnetism, 1 Section)
2002, Summer Taught First year Undergraduate lab (Electromagnetism, 1 Section)
2002, Fall Taught First year Undergraduate lab (Mechanics, 2 Sections)

Professional Societies

2003-current American Physical Society.

Conferences Attended

2006 The Feynman Integral and Related Topics in Mathematics and Physics Conference – Lincoln, NE
2004, 2005 Division of Atomic, Molecular and Optical Physics Meeting, (DAMOP) of the American Physical Society

Job History

2003-present Graduate RA under Prof. Herman Batelaan at UNL
2002 Undergraduate TA and then Graduate TA at UNL
2001, 2002 Undergraduate TA at Doane College
1999-2001 Library Work Study Assistant at Doane College
1996-2000 (summers) Worked as carpenter and cabinet maker in MN and MT

Talks

2006, May The Feynman Integral and Related Topics in Mathematics and Physics Conference – Lincoln, NE
2006, March Nebraska Section of AAPT at *Edgerton Explorit Center* in Aurora, NE(co-presenter)
2005, Oct. Physics Seminar given at Eberhard Karls Universitat Tubingen, Germany.
2005, March Physics Seminar given at UNL.
2004, May DAMOP.

Papers

Brett Barwick, Chris Corder, James Strohaber, Nathan Chandler-Smith, Cornelis J. Uiterwaal and Herman Batelaan
Laser induced ultrafast electron emission from a field emission tip
Submitted to New Journal of Physics, Feb. 2007

Brett Barwick, Glen Gronniger, Lu Yuan, Sy-Hwang Liou and Herman Batelaan.
A measurement of electron-wall interactions using transmission diffraction from nanofabricated gratings,
Journal of Applied Physics **100** (2006) 074322
(Also featured in Oct. 30, 2006 issue of Virtual Journal of Nanoscale Science & Technology)

Glen Gronniger, Brett Barwick and Herman Batelaan
A three-grating electron interferometer
New Journal of Physics **8** (2006) 224

Glen Gronniger, Brett Barwick, Tim Savas, Dave Pritchard, Alex Cronin and Herman Batelaan
Electron diffraction from free-standing, metal-coated transmission gratings,
Applied Physics Letters **87** (2005) 124104

Stephen J. Friedman, Brett Barwick and Herman Batelaan,
Focused-laser interferometric position sensor,
Review of Scientific Instruments **76** (2005) 123106

References

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Associate Prof. Mark Plano-Clark
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